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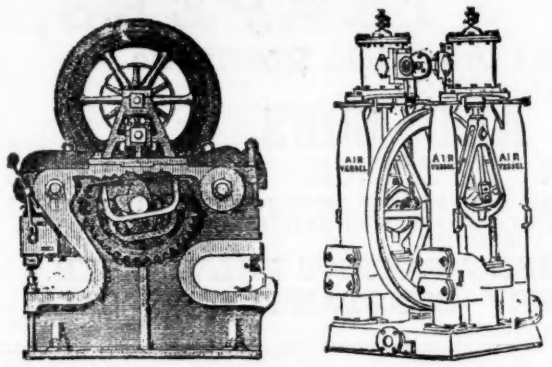

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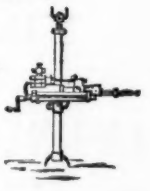

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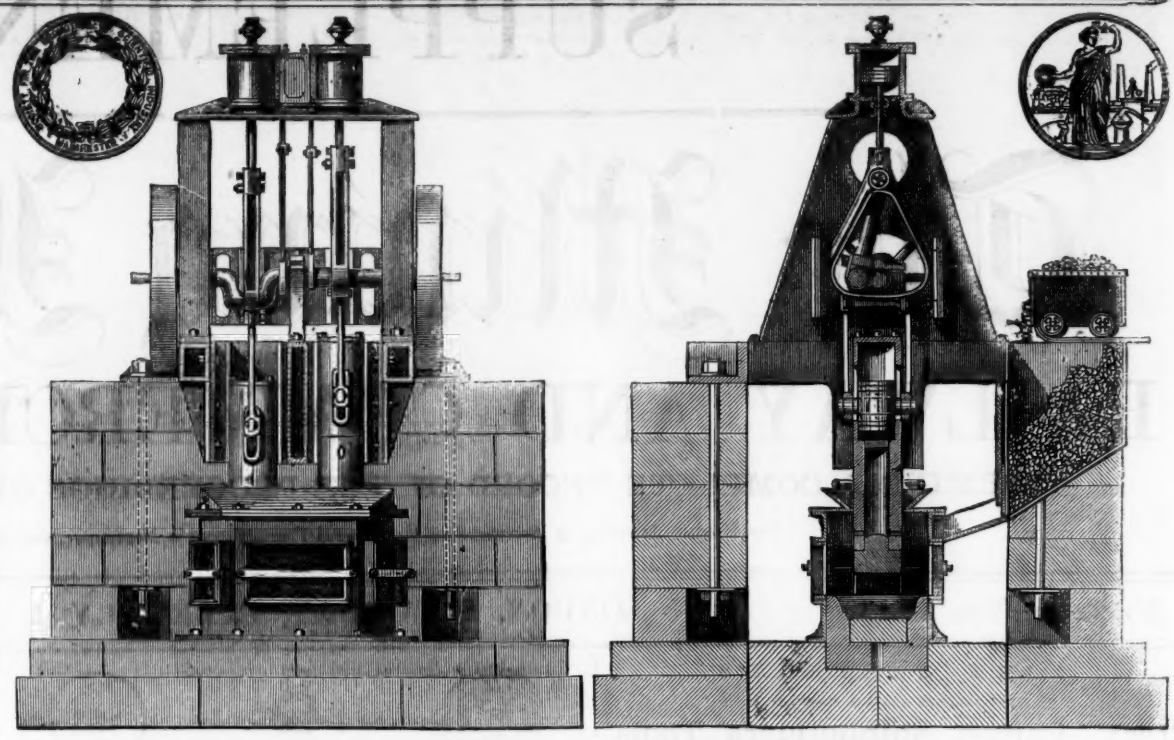

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Original Correspondence.

HOYLAND SILKSTONE COLLIERY COMPANY.

SIR,—In last week's Journal your Yorkshire Correspondent has the following—"On Monday evening the directors of the Hoyland Silkstone Colliery called their creditors together for the purpose of obtaining an extension of time to meet the liabilities," &c. He surely meant the *Stanhope Silkstone*. His remarks would tend to do us serious injury, and we must ask you to contradict the statement in your next issue.

The HOYLAND SILKSTONE COLLIERY is four times the magnitude of the Stanhope Silkstone Colliery, and we consider our investment *very* satisfactory, and not at all likely to call for the general panacea at present—liquidation.—*Jan.* 28. JOHN HIGSON.

(For Messrs. Wells, Birch, Ryde, and Co., Hoyland Silkstone Colliery.)

[The Editor much regrets the inaccuracy; but the position of the Hoyland Silkstone Colliery is too well known for any unpleasantness to result, especially as the name of the chairman given showed that it was not the Hoyland Colliery that was intended.]

COAL MINING AND COLLIERY MANAGEMENT.

SIR,—In my last letter reference was made to the necessity of producing coal in the best possible condition for the market, and to work it a cost enabling us to compete with others in the markets of the world. To enable us to hold our own, the only remedy lies in the two propositions named above—a high quality of coal, and reducing its cost of production. We should be pleased to witness a return to the old system of working in English mines, that is careful working of the coal, longer hours, and moderate wages; unless this is done is it possible for us to compete with foreigners, whose workmen are paid lower wages, and work much longer time in the mine; instead of six hours, their time is probably 10 to 11 hours. We should much rather see the wages and hours of work more nearly assimilated in all the countries of Europe, and all receiving fair remuneration for their labour. If British miners cannot submit to reduced wages, or to work longer hours so as to utilise to a greater extent the expensive plant belonging to most colliery undertakings. If the works cannot be carried on at a profit or without a serious loss, they must be brought to a standstill. There is then the alternative of capital being transferred to foreign countries, which has taken place already to a great extent within the last 15 years, both in coal and other mines, in iron and other manufactures. This is a state of things much to be deplored, when both capital and labour are being transferred to other countries, it may be our rivals in the markets. Far better would it be if the resources of our own country were well and more fully developed. There is still much room for improvement in the quality of the coal sent from our collieries, the utilising of small coal, and in the mechanical operations both underground and on the surface, to bring about the most economical results in the working of coal. Mining engineers should be conversant not only with practical and theoretical mining, but also with the construction of railways, bridges, and viaducts. They should be adepts in the art of surveying, and possess clear sightedness in the laying out of surface and underground works. A knowledge of mechanical engineering is essential, and two years of training amongst machinery, tools, and engines of various kinds is a good preparation for an apprenticeship to a mining engineer.

The system of working coal is a matter of the utmost importance to be considered. The two principal conditions requisite in long-wall work are moderately good roof and a good floor. If these are suitable there need be no doubt of the superiority of the long-wall, either with manual labour or coal getting machines, in the percentage of large coal obtained, in the economy of working, and in the safety and simple means of ventilation. Where two seams of coal are worked together, one under the other, the packing and filling-in of the part excavated should be well performed. This must be filled up with the refuse from the coal working, and the taking down of the roof stone for the pack walls. The soundness of the work is essential (in the lower seam at least) if this is to be a success.

During the last 30 or 40 years great advances have been made in the ventilation of mines; furnaces have to a great extent been superceded by fans and other ventilating machines, and the quantity of air in circulation increased fivefold in some cases, and more. This has been obtained not only by an increase of ventilating power, but also by enlarging the airways generally throughout a mine, so as to reduce the heavy friction ensuing from a high velocity of air currents. The quantity has been further increased by splitting the main current of air at or near the downcast pit into several currents, which should again unite at or near the bottom of the upcast pit. This system thus affords a increase of area for the whole of the air to circulate by and at a reduced velocity.

Great improvements have also been effected in the method of raising coal to the surface. From deep pits as much as 1000 tons of coal are raised in about 10 hours. Much depends on the arrangements at the top and bottom of the pit for facilitating the work. If two-decked cages are used two platforms can be arranged, both at top and bottom, so as to change the tubs without any movement of the cages after they are at rest on the "keps." The ropes are much relieved from strains by this method. M. E.

GAS SAFETY-LAMPS FOR MINES.

SIR,—If I recollect rightly, it happened before the great explosion some years ago at the Oaks Colliery, in Yorkshire, that a large quantity of inflammable gas was given off, and some attempt was made to utilise it for the illumination of the mine. Whether this had anything to do with the number of lives lost I do not know, but I believe that the gas-lighted portion was that which suffered last. Be this as it may, I consider that the principle of using the gas for lighting purposes is the right one, because we burn it up near to where the gas is generated, instead of carrying the contaminated air through portions of the mine where before there was no gas to explode. The gas liberated in the faces or in the goaves could with little trouble be collected in a small gasometer, and then by the use of such a lamp as that invented by Mr. Wilhelm Effer, of Bonn, the explosion through burning it would be impossible, whether the underground gas-lamps be fixed in horse ways or elsewhere, or used as a substitute for the ordinary Geordie now used. The gas is supplied to Mr. Effer's lamp by means of a metallic pipe or hose pipe, or a combination of both. The gas is admitted to the lamp by means of a two-way cock, of such a construction as to admit gas to an annular Argand burner, or to a small central burner, which he calls the lighting burner, and which serves to light the Argand or main burner. For this purpose the plug of the cock may be made with a large hole through for communication with the Argand burner, and with the gas supply passage; and this plug has also a small spiral recess communicating above with the large through hole, and below with a small passage for the gas supply. This recess then in one extreme position of the plug effects a limited or slight communication between the lighting burner and the gas supply pipe, and in the other extreme position full communication between the Argand burner and the gas supply pipe, the supply to the lighting burner being then cut off; in the medium position gas is admitted to both burners.

The gas admission to the lighting burner may be regulated by means of a small screw plug passing across or into the passage leading up to the two-way cock. The air supply enters a casing above the cock by one or more openings. The Argand burner is surrounded by a ring or cap, terminating below in an annular disc fitting in the aforesaid casing or air supply chamber. The disc is provided with openings for admitting air to the upper outer part of the Argand burner. Air passages are also provided leading to the space between the Argand burner and the lighting burner. On the top of the air casing there is a round or polygonal open casing or framing suitable for receiving a pane or panes of thick glass, mica, or other suitable strong transparent substance, to show light all round, or only partly so. In the latter case a metallic or other reflector is or may be placed on one side, and the pane or panes in the other part; or an entire cylinder of thick glass or other transparent material may be applied. On the top of this lantern part there is a metallic ring or cylinder, the upper part and top of which is formed with wire netting; or a separate wire netting case may be fitted therein or thereon, so as to be vertically adjustable for the proper exit of the products of combustion through the meshes of the wire netting. If the metallic cylinder is of a suitable length it serves to cool these products. A small pipe is passed through the lantern casing just over the burner. This pipe is of such a size that an ordinary lucifer match will just pass through it. A roughened friction plate inside the lander casing can be moved by a small outside lever, the spindle of which passes through a small tube; a spring brings it back to its normal position.

The mode of lighting the lamp is this—Insert a match through the small pipe, and move the friction plate across the end thereof; the Argand burner or the lighting burner (according to the position of the cock) will then be lit, and the match on being withdrawn from the lamp will be quite extinguished, the pipe being made sufficiently long for that purpose. If the lighting burner only is lit, turn the cock so that the gas admission is shifted to the Argand burner, which will then be lit. To extinguish the Argand burner turn the cock the other way, when the gas will be turned on to the lighting burner, which will be lit by the Argand burner, and the flame of the latter will then go out as the gas supply thereto is cut off. The lighting burner serves to light the Argand burner whenever required.

Should the lamp at any time happen to be extinguished, it may be assumed that this is caused by the presence of dangerous gases or insufficient ventilation. If on insertion of a lucifer match, in the manner above described, either of the burners refuse to light, it is a certain indication of the presence of dangerous gases. If, on the other hand, the lamp does light, it may be inferred that the danger has been removed by ventilation. Should there be an accumulation of noxious or dangerous gases in the mine or other place where the lamp is used, the consequence would be that the light in the lamp is extinguished, and no explosion takes place, by reason of the use of the Argand burner, which will not burn except with a due supply of oxygen. Any objection which may be raised to this system will be readily answered by— PHILO.

Manchester, Jan. 25.

SOFT STEEL AND TIN-PLATES.

SIR,—During the last few years great advances have been made in the manufacture of soft steel, and its uses for many purposes in lieu of the better classes of iron; and from present indications the effect on the tin-plate trade promises to be of vast importance. About six years ago a small trial of steel made by the Landore Siemens Steel Company was tested by the writer, and in all respects (save one) it showed a marked superiority to the best charcoal iron. The drawback in question was the hardness, and consequent difficulty in rolling.

Soft steel was first made especially for the trade by Landore Siemens Steel Company, who, after many drawbacks, produce an article that, with very few exceptions, gives every satisfaction. Several other makers have now come into the field, notably the Steel Company of Scotland, Glasgow, and Messrs. Wright and Butler, Gower-road, Swansea. The last mentioned also produce an excellent article for wire-drawing purposes.

The greatest difficulty with which the makers have had to contend has been the want of uniformity in tensile strength; this was at first so serious that it threatened to be fatal to its general use, and those who in the event of its success would feel its effect most did not fail to make the most of this defect. It was generally noticed that the steel giving this defective result was always harder than it should be, and detection, therefore, became a very simple matter. The want of tensile strength was shown by the plate fracturing on being tested; but this never took place across the grain, but always with the grain—yet in these plates the surface and general appearance gave every satisfaction. The makers have, however, by greater care, as well as extended knowledge of what is really wanted, so far reduced this defect, that in now appears very rarely, and, being easily detected in the bar as well as the black-plate, it should not, with ordinary care, cause any anxiety.

The steel as now supplied is in form of a bar that is rolled to the users' own gauge, and the effect on the makers of best charcoal plates will be that the forge power now used for the manufacture of ordinary charcoal irons will have to succumb to this new rival. Again, it will enable those houses who buy bars (and have hitherto confined their manufacture to coke quantities) to compete with the specialities made from the higher grades of charcoal iron, the manufacture of which has hitherto been confined to few works. It is the opposition that will arise from these makers that will be the strongest; but the following facts show that eventually they will have to succumb.

Now, in the working of the soft steel bar into plates it was found that the proportion of loss in scrap and waste was 3·01 of steel to 2·375 of charcoal iron of the highest quality—size and strength of plates in each case being the same. This alone shows a great difference. In pickling soft steel plates are found to take a little more acid than iron, as the plates do not clear quite so easily, this being no doubt attributable to the density of the steel. In annealing, too, rapid heating and cooling is found to have a greater injurious result than with iron, so that care is required in working the furnace to guard against this. In white pickling, also, steel plates require more time than iron, otherwise the liability of "pinholes" is very great; but this is very easily dealt with, by not working the two classes in the bath at the same time.

The greatest point of difference is, however, at the assorting bench. Now, I give as approximate the proportion of wasters in charcoal tin-plates as follows:—Ordinary charcoal, say of × strength, 12 to 15 per cent.; best charcoal, ditto, 13 to 20 per cent.; extra best charcoal stamping, ditto, 18 to 25 per cent. The lowest figures represent what it is possible at times to work at; but, as any practical man will testify, the highest do not by any means represent the heavy proportion of waste that will often arise in the higher grades of best charcoal stamping plates. This question of the proportion of waste is one, if not the most, vital question a manufacturer has to deal with, and the undernoted actual result will show the comparative superiority of the soft steel metal:—2156 boxes tin-plates, soft steel, C & ×, gave 9¼ per cent. wasters; and 1827 boxes, ditto, × × and upwards, gave 11¾ per cent. wasters. These results are most marked, and are gained by the almost perfect homogeneous character of the metal, and its absolute freedom from any foreign substance, so frequent in hand-worked charcoal iron. After working nearly 1000 tons of steel bars I can confidently assert that in this respect there was always a marked superiority. The question of cost is again a very important one, and one on which, perhaps, no two makers would agree; but I have found that the steel bar will produce a plate superior to any best charcoal at a less cost, and the same plate, coated as for an ordinary charcoal quality, does not exceed it in cost.

This is also a very great advantage, the basis of the two classes of plates being equally good, the question of charcoal or best charcoal, becomes what it really should be—one of finish, increased quantity of tin used, and fine assorting. It is, perhaps, not so generally known as it should be that very large quantities of plates made from this metal are branded charcoal and best charcoal, and so exported, and these plates, I am in a position to say, are exceptionally well received, especially for stamping purposes in the United States. One of the largest firms of shippers (who are manufacturers) export of their make of soft steel over 35,000 tons, which go as charcoal into the United States market for stamping purposes.

There is no doubt that the adoption of soft steel for this purpose will give an impetus to foreign competition, especially in the United States, where the manufacture of soft steel is not at all behind our own. It is but a question of time for the opposition it meets to be overcome, and as a quality to compete with the lower grades of plates will soon be in the market. Tin-plates with an iron basis will eventually be as obsolete as iron rails; indeed, the effect will be quite as marked in the high-classed sheet irons for stamping and similar purposes. It is for us quickly to realise the inevitable, and at once to take advantage of all the benefits priority confers, that this staple trade may not slip from our hands as others have done and are doing. Government now specifies that all barrack utensils shall, as far as possible, be made of soft steel.

A TIN-PLATE WORKS MANAGER, NOT A STEEL MAKER.

January, 1879.

FURNACES FOR GENERATING STEAM.

SIR,—It often happens that although mineral fuel and even good wood are unobtainable steam could be advantageously employed if it could be generated with straw, chaff, and other similar light material. An invention calculated to meet this requirement has recently been introduced by Messrs. MOWER and PITT, of Rangoon, British Burmah. Their furnace consists of two side cast-iron grates placed under the boiler at an angle of 50°, and made on the Venetian principle to admit sufficient air, and not to allow the husk to run through into the ash-pit. The side gratings rest on cross-bearers, which carry the two triangular revolving under grates, running the whole length of the furnace. These under grates form a trough, so that no husk can run through the open space between the sloped grating. They can be made to revolve outwardly when necessary to clear themselves from the dead ash. The three-bladed triangular revolving under grates are moved by turning a pair of mitre wheels driven by hand or machinery.

When it is necessary to clear the furnace the man in attendance has only to turn the handles outwardly, and the dead ash drops away, and the body of red-hot fuel which has been burning on the side Venetian grates, but which still contains much heat, falls, or is forced down by the fresh stuff into the trough formed by the revolving under grates. Thus one-third of each revolution of the revolving under grates first clears away or gets rid of the black or dead ash; then the revolving grates receive the red-hot body of ash which has been burning in a flame on the side Venetian grates, and allows fresh or new combustible matter to follow or take its place on the side Venetian grates, by which means a continual feed of fuel is kept up in the furnace. The furnace is fed from both sides of the boiler for the whole length of the furnace. The boiler is supported by cast-iron brackets.

In a double-flued boiler of 30-horse power it requires 30 square feet of grate area to evaporate a certain quantity of water to generate steam in a given time with coals, but it takes 60 ft. of grate area to evaporate the same quantity of water in the same time with paddy husk, and the necessary amount of fuel to supply this area is obtained by adopting this invention of supplying the fuel longitudinally—at the sides of the boiler. By this novel and simple contrivance of side feeding any amount of grate area can be obtained, and thus the great difficulty in generating steam with paddy husk—the want of great area, and the impossibility of supplying fuel of this kind to a sufficient grate area—is thoroughly overcome. The paddy husk runs from a mill into a hopper, which is always kept full on the top of the boiler, and the furnace feeds itself from this hopper, thus doing away with all labour in connection with it. It is obvious that any kind of chaff, light dry peat, or other fuels of the same kind, could be substituted for the paddy husk, so that the invention ought to come largely into use. S. J. C.

Leadenhall-street, Jan. 27.

THE "ECLIPSE" ROCK DRILL.

SIR,—We shall feel much obliged by your inserting in next Saturday's Journal the enclosed copy of letter, dated 29th inst., from Messrs. Henderson and Son, Truro, who are using our Eclipse rock drill at the West Basset Mine, near Camborne, Cornwall. It must be borne in mind that only one 2½ in. drill is being used in the level.—*Jan.* 30. HATHORN AND CO.

SIRS,—In reply to your letter of the 27th inst., we have to inform you that at West Basset the drill continues to give every satisfaction. We have just got through some very hard ground indeed, and are now making up for the time lost over it at the rate of 6 ft. a day. Our drivage for the four weeks ending Monday last was through favourable and very unfavourable ground—11 fms.

Truro, Jan. 29. HENDERSON AND SON.

RICHMOND MINING COMPANY.

SIR,—I learn from several quarters likely to be well informed that the directors of the Richmond Mining Company intend to pay the usual quarterly dividend of 10s. per share at the beginning of February, which, if the case, will doubtless take many as well as myself very much by surprise. I have gone very carefully into the matter, and I think that the following statement of the financial position of the company at the present time will be found very near the mark:—

Balance at credit of account, Feb. 28, 1878		£ 77,000
Profits—March and April (official estimate)		63,000
Ditto May „		19,100
Ditto, June and August (say)		40,000
Total receipts (say)		£199,000
EXPENDITURE.		
Dividends—20s. paid July 20, 1878	£54,000	
10s., Aug. 3	27,000	
10s., Nov. 5	27,000	
10s. (February, 1879)	27,000	= £135,000
Additional sum voted to committee		3,000
Loss by fire of fuel, &c., and cost of rebuilding and improvements		25,000
Five months' working expenses—including mining, dead work, and general expenses at Eureka and London (say 6000*l.* per month, which is considerably under the average)		30,000
One year's interest on debentures		2,500
Ditto, royalty on refinery		2,500
To which must be added the cost of stores (fuel, &c.) on hand at Eureka		25,000
Making the total outlay to date		£223,000
Against an income of		£199,000

The most of the items stated above there can be no doubt about, and a reference to last accounts will show that the estimated items of expenditure are probably much understated, while the official estimates of profits will probably be found to be overstated—at any rate, I presume that they are based on the Eureka standard. Besides, I have not taken into account the expenditure on account of capital for new hoisting machinery and air compressors, also law expenses at Eureka and London, which I am unable to estimate, but which probably will not be less than 10,000*l.*

I have thus shown that a sum of from 25,000*l.* to 35,000*l.* will have been expended by the company (should the February dividend be paid) in excess of what has been earned, and I am curious to know where the money has come from.

It will be remembered that the principal (and best) recommendation of the committee was that a reserve fund of about 100,000*l.* for working capital and contingencies should be formed, being absolutely necessary for the efficient carrying on of the concern, and at the meeting in June last the Chairman referred very strongly to the necessity for a large reserve, and stated that the board had often felt the want of it, and it was suggested that bonus shares should be issued to the extent of at least 90,000*l.*, retaining that amount as working capital, &c., and it was generally understood that such a fund was to be formed one way or another. What seemed so apparent and necessary to the shareholders and directors six months ago appears now to have been quite overlooked in the anxiety to continue payment of dividends, and the opportunity of forming a reserve fund has again been allowed to go past. The fact is that the November dividend should not have been paid at a time when the company was earning nothing, and it appears to be absurd to think of paying one now, when the new furnaces, of which so much was expected, are actually smelting a smaller quantity of ore than the old ones, and that of 50 per cent. less value, and seeing that debentures to the amount of 25,000*l.* will have to be paid at the end of March, and that there are two, if not three, very serious lawsuits still unsettled. I trust I may be mistaken, but it seems to me that

the directors are in a fair way of plunging the company into a state of financial weakness worse than it has ever been in before, and which they may have greater difficulty than ever in getting out of, by their determination to go on paying dividends whether earned or not. They appear also to have gone back to the old plan of keeping the shareholders in the dark as much as possible, as instanced by their suppression of the report on the mine made by Mr. Tonkin at the request of the board, presumably because it is unfavourable.
Jan. 29. INVESTOR.

P.S., *Jan.* 30.—I posted my letter to you last night, and this morning I have received the circular announcing that the quarterly dividend of 10s. per share is to be paid on Feb. 4. The statements made in the said circular fully confirm my estimate of the financial position of the company at date. Taking the figures therein stated, that the balance on hand on Dec. 1 was 50,000*l.* (of which only 19,000*l.* was in cash, 31,000*l.* being in bullion *not* realised), the payments to be met are—

Dividend of 10s. per share	£27,000
Two months working expenses	12,000
Committee, interest, and royalty	8,000
Balance of reconstruction, machinery, &c.	10,000
Cost of stores on hand	25,000
In all	£82,000

So that without taking law expenses and other changes into account there is an apparent outlay in excess of receipts of about 30,000*l.* The directors might have informed us how much of the bullion was realised at date, instead of at Dec. 1, which they could have ascertained by cable; or, when it was likely to be realised, how much of it consists of lead, and whether it is at New York or China. I am afraid that the shareholders will not consider the statement altogether satisfactory, or certain that the dividend and debentures will be wholly paid out of profits made last year, as it is quite evident that both will have to be provided by borrowing money at 12 to 14 per cent. per annum. Do the directors really expect the shareholders to believe that the only payments which have to be met from the balance of 50,000*l.* are the dividend and debentures? It is stated that a large portion of the cost of reconstructing the furnaces, &c., has been paid. Why are we not told in plain £. s. d. the amount of the large portion paid, and the larger portion which has still to be paid? as well as what has been expended, or is still owing, for stores, interest, mining and other expenses, since Dec. 1, that we might know what balance remains available for dividend.

The statement that the new furnaces are smelting 50 tons a day does not appear to be in accordance with the weekly returns published—the quantity never having reached 50 tons a day.

From the concluding statements in the circular it would appear that taking the most favourable estimate of reserves in the mine (34,000 tons) there is only sufficient ore to keep the furnaces going for seven or eight months, while taking Capt. Tonkin's estimate (12,000 tons) which is probably based on more certain data, there is only sufficient for ten or twelve weeks! the future depending on further discoveries, of which there is no certainty. Presuming the average value of the ore to be $50 per ton, the net profit on realisation cannot possibly exceed 20 per cent., which on the large estimate means a total of not more than 68,000*l.*, while on the smaller estimate it is only 24,000*l.*? which scarcely warrants the present quotation for the shares of 9¼ to 9½ ex div.

Altogether, a weaker attempt to justify the payment of the dividend could not have been made; as, even taking it as it stands, it means that every farthing earned is to be paid away to meet dividend and debenture, and the very idea of a *reserve* fund, I am afraid, must be abandoned for ever. —— INVESTOR.

RICHMOND MINING COMPANY.

SIR,—The sanguine and inflated terms in which your Nevada correspondent writes of the position and prospects of the Richmond Mines, of the admirable construction and of the great success of the new furnaces, would surely have been somewhat modified if he had known that the returns they have yielded, as weekly detailed in your columns, from Dec. 15 up to last week, would barely have covered the usual current expenses of the company, formerly calculated to be about 1000*l.* sterling per day. In January, 1878, the weekly returns averaged fully $90,000. FACTA NON VERBA.

COLORADO UNITED MINES.

SIR,—A paragraph relative to the above mine appeared in last week's Journal which I think was unique of its kind. The purport of it seemed to be to depreciate the market value of the shares, and this was attempted to be done not by any direct or reliable information, but by a tissue of inuendos, such as "it is whispered," "jobs," "it is even hinted," "transactions," &c. I do not know anything of the standing of the American journal which is stated to be the source from which these insinuations come, but such statements are very easily made, but are they true or fallacious? I am a shareholder, and I have my information as to this mine from a source on which I can depend, and have had it for some years; and I say that the English shareholders have not paid for their shares twice over, as stated. The Colorado Terrible was a successful and dividend-paying mine, when, as often happens, claims of an adverse nature were set up by some of neighbours; and after some litigation a compromise was effected, and the whole group of adjoining mines were amalgamated, and for this purpose a fresh issue of shares was made to pay for the new properties, and there is about 18 mines in all.

One gentleman (Mr. Hamill) got 16,000 shares for his interest in these acquired mines, and he has not parted with a single share, although 6*l.* to 7*l.* could have been got for them, so he "has not unloaded on the English market." Arrangements are now in progress by which he will take the sole management of the mines at Colorado, and as he is an English gentleman of unblemished reputation; and is the holder of one-third of the entire stock of the company, I believe he will devote his best energies to make the mines successful. He is also the principal creditor of the mines, and is willing to make reasonable arrangements for liquidating the debts of the company, which are the only obstacle to its success. Let us not forget that these mines sold 27,000*l.* of ore during 1877 under many disadvantages. I would recommend those who have not read it to read Mr. Thomas Rosewarne's report, which I gave credence to as it was corroborated to me from the private source I referred to. I hope I have said enough to show the fallacious nature of the paragraph in question, and anticipating as I do a brilliant future for these mines I hope shareholders will not throw away their shares, as I believe their value will soon greatly improve. A CANNY SCOT.

COLORADO UNITED MINING COMPANY.

SIR,—The paragraph which you quoted a fortnight ago from the New York Engineering and Mining Journal respecting this mine is important as bearing on the position and future of the company. Its purport is that the company as reconstituted is another example of the enterprises which do so much discredit to legitimate mining in the United States by preventing the investment of British capital. Now, coming from a United States journalist, this is a very serious matter; surely he must have a good reason for writing in this disparaging strain about a concern by which some of his countrymen have profited. It should be remembered, however, that the late vendors are men holding positions which should make them widely different from the speculators who sell worthless mining properties in Utah, Nevada, and California to credulous British capitalists. Mr. Chaffer is a United States senator, Mr. Hamill a senator of the State of Colorado, and Mr. Moffat manager of the Denver National Bank. These gentlemen took payment in shares, and the shareholders were given to understand that they were anxious to show how much more honest and straightforward they were than many of their countrymen, and to attract British capital to the State by proving to the shareholders how remunerative a property they have acquired. Thus they are identified in every way with the success of our mine, about the richness and lasting value of which we certainly have not been without abundant independent testimony since the first company was formed. Should, therefore, Mr. Hamill consent to undertake the management, it is not altogether unreasonable to expect before long a much higher figure for our shares than they now stand at.—*Jan.* 27. —— OLD SHAREHOLDER.

NOUVEAU MONDE MINING COMPANY.

SIR,—Some months back a notice was issued by this company requesting the shareholders to send in their shares for verification, and at the same time announcing that the company had purchased some mines in Venezuela for the purpose of working them. Can any of your readers give any information, through the Journal, as to what steps are being taken in the matter, as no further information on the subject has emanated from the company?
City, Jan. 28. —— A SHAREHOLDER.

MINING MARKET NOTES.

SIR,—Excepting the business which has taken place in a few of the principal foreign mines, the mining market has been very dull. The depression which continues in mining shares is in accordance with the state of the country, and until we have shaken off the war fever business cannot be expected to be good. Money, however, is cheaper, and will no doubt be an incentive to a somewhat better state of trade. The prices of mining shares being depressed in common with other securities the present time is a most favourable one for investment. Shares at low prices are often well worth the attention of speculative investors. Those who look upon mining as a chance, and have neither the time nor the inclination to watch the progress of a mine can at very little risk indulge their fancy. There are gold, silver, tin, lead, and copper mining shares selling for mere trifles—a few shillings. Some having liability and some none, but in all more or less there is a chance of improvement in the depressing influences, and consequently better prices for the shares.

Enquiry is frequently made for "cheap" shares, no consideration being made as to risk for the money which is invested in them, with as much hope of success as one would have in a Fine Art or Lottery ticket. The shares are bought to be almost forgotten—to be "locked up." Not unfrequently have large sums of money been made in this way. In some cases there are shares which have in bygone times commanded high prices selling very cheaply, when suddenly they have again attracted attention, and been in great demand at the old prices. Shares of this class are the best to buy up, for their previous high prices have given them a character which they never lose; and, therefore, they are usually very sensitive on enquiry being made for them. The low price may be caused by a falling off in quantity and quality of ore, bad management, scant funds, an unfavourable metal market, or a combination of some or of all these circumstances; but whatever it may be, when removed, the price quickly improves. There are very reasonable prospects of success in some of these mines. A buyer need not absolutely throw his money away in small priced shares. If he consults a respectable dealer in mining shares he will be guided into those channels which present the greatest probability of success. The best of mines on the market have seen times of marked depression. Judgment is required to take advantage of the opportunities which are so often presented.

Richmond: A letter has been addressed to the shareholders announcing the dividend of 10s. per share and very briefly noting operations in the mine and at the works. A few observations are made on the different estimates of ore reserves made by Captain Tonkin and Mr. Rickard. Business in the shares pretty good, prices steady.—Don Pedro: The return, which was known last Saturday, though an improvement on the first half of December, is not so good as expected, and an absence of information relative to the late improvement caused the shares to decline. I am persuaded that there will be a fair success here before long. Temporary stoppages for permanently protecting parts of the machinery exposed to breakages is most likely the reason why we have not had further news. Frontino improved on the receipt of a favourable return; the advance is maintained. The telegram deserves careful perusal. Eberhardt are a little easier, but few transactions have taken place. Colorado during the week have been quiet; price steady. Sierrra Buttes, Plumas, and United Mexican are steady; business quiet. Home mines have been dull, and prices have drooped.
Draper's Gardens, London, Jan. 31. WILLIAM GABBOTT, Stock and Share Dealer.

EMPLOYMENT OF CORNISH MINERS.

SIR,—We have had many letters lately from a client in Cornwall on the subject of the great distress that prevails among the mining population there, and making various suggestions to promote their welfare in a business-like instead of a merely charitable way. As the ideas put forth seem worthy of ventilation, we beg to condense them as follows:—That an association be formed under capable management, and with three trustees, for the purpose of finding immediate employment for miners out of work. That the association take the form of a limited liability company, in shares of small amount—say, 5s. or 10s. each. That likely mining ventures be entered upon to seek for minerals, or that waste lands be cultivated. That all subscribers to such an association will pay up their shares in full, and can be registered as owners thereof, or can place them in the names of the trustees for charitable purposes for ever. If no "find" should follow the explorations the miners would have their wages, and they and their families would be kept from starvation, but in would seem to be a necessity that profit should be made by the judicious cultivation of waste lands. We are willing to take some trouble herein, and, in case of such a scheme being taken up, would grant use of our clerks and offices, as below, at a nominal charge.—*Great St. Helens, Jan.* 28. J. C. BOLTON AND SON.

PARYS MOUNTAIN COMPANY.

SIR,—This vast mining property quoted at 6s. per share gives the small market value of about 5000*l.* sterling, and this for a property valued at upwards of 60,000*l.* not many years since, and considered to be one of the finest speculations of the day. A short time must now intervene ere the success of the mine is fully established. I note the excellent opinion of your Chester correspondent last week signed "Mining Enquiries," in which he states his belief in striking an unlimited mass of ore in the 90 south. It would be impossible to set any value on this property should such prove the case, judging by the wealth found above, which yielded three millions in profit. Shareholders in this undertaking may understand that parting with their shares at this time for a few shillings per share are by no means studying their own interests. No mine can at this moment compare with Parys Mountain as a fine speculation for about the 20th part of its true value should the ore suddenly come in at the 90 south. The opinions of eminent mining judges are very favourable that this great object will be shortly attained, and indeed that a turn of the pick may hourly and for ever settle this important point. A rise in copper may also suddenly occur and create again a demand for the shares.
MINING INVESTOR.

THE MOLD MINING DISTRICT.

SIR,—On my way from Ruthin to Mold yesterday I was much pleased to find that operations had actually commenced at Gwernymynydd by a spirited company, who by their extensive and comprehensive project seem determined to surmount any and every engineering difficulty in the complete development of this grand old mine, so famous in the production of lead by mere surface operations hitherto. The rich Cathole lode is that upon which the Gwernymynydd Flat has been so productive, but the lode in question is whole in every bearing measure—the lower Flat, the chert, and the producing sections of carboniferous lime rocks for nearly a mile in length, and only partially worked from this point westward for nearly a mile further, in which a splendid course of ore was worked to a depth beyond which further progress was almost an impossibility without additional pumping power. To meet this and every probable emergency the present company are doubling the existing power—that is, by the erection of a Cornish pumping-engine on the Gwernymynydd end, the cylinder being 85 in. diameter, to assist one now ready to work at Cathole of the same dimensions. Surly with such power and the usual steam accompaniments—steam capstans, winding-engines, and crushing mills—nothing but skilful management is wanted to produce an Eldorado in North Wales. Another mine in the north of this mountain, called Rhydalun, is springing with rapid strides into notoriety: 50 tons of ore were raised and sold from this mine last month. The strata are identical with those of Cathole and Gwernymynydd, and the prospects are really grand. These facts, in connection with the discoveries at Pant-y-mwyn, and other spirited trials now being made in the intervening ground, are giving new life to what several years since was, and will be again, the richest lead producing district in, I may say, the world.—*Chester, Jan.* 29. MINING ENGINEER.

MINING IN THE GWENNAP DISTRICT.

SIR,—Attention of capitalists is being drawn to the celebrated Clifford Amalgamated Mines, with a view eventually to resuscitate their working. The immense accumulations of leavings from the large quantities of copper ore returned are about to be treated chemically under the direction of Capt. Richard Pryor, with every probability of success. In the same neighbourhood a sett is taken to work for copper, and a lode discovered producing ore within a few feet of the surface. The discoveries of the most celebrated mines of Cornwall and Devon were made under similar circumstances. Tresavean commenced ore-bearing within a few fathoms of surface, and continued to over 300 fms. below, turning out nearly 1,500,000*l.* sterling worth of copper. Two or three others are being commenced in this district with equally good prospects, a small outlay only being required to test their value, hence affording the enterprising public a a good chance of enriching themselves with little or no risk.—*Cornwall, Jan.* 29. CHARLES BAWDEN.

CORNISH MINING.

SIR,—It would almost appear that the mines of Cornwall as a speculative industry are losing their proper position on the commercial exchanges of the empire. The principal cause of mining speculative capital being withheld does not arise from any failure in the production of mines, but chiefly from the unprecedented depression in trade generally, and consequent low price of metals; the slightest indication of a revival would cause abundance of capital to flow into the county for the further development of its mineral resources, the extent of which it is impossible to estimate; suffice it to say the produce from this industry for 70 years—from 1804 to 1874—amounted to the enormous sum of 84,135,672*l.*, such being officially recorded in the Stannaries of Cornwall. Of this yield 68 of the principal mines, lying in an area of seven miles east to west by two and a half north to south, supplied 32,297,472*l.*, the major portion of which was returned out of the mines in the Gwennap district, comprised within a limit of two miles east to west by one mile from north to south. I have now before me statistics of 22 tin and copper mines, showing the amount of capital subscribed as required to be 950,000*l.*, which resulted in mineral sales of 6,526,904*l.* These figures of produce sold by the mines yielding tin and copper preve increasing discoveries of minerals from extended development, and the vastness and value of the unwrought mineral wealth of the county, to which capitalists are giving more attention than for the last 20 years. Practical knowledge leads me to say that the mineral-bearing rocks of Cornwall will yield to capital invested for their development an average annual profit of 20 per cent. in the immediate vicinity of the once rich Tresavean and Clifford Amalgamated (the former returned in 40 years the sum 1,407,387*l.*, while the mines embraced within the limits of the latter setts returned 6,286,645*l.* worth of mineral). There are some two or three mines about starting in new or unwrought ground having all the elements essential for the production of mineral in equal quantities to what has been returned from those famous old mines, indeed they are a continuation of the same productive veins, and the expense necessary for their development will not exceed the average expenditure attending mines in embryo. At present there is not in Cornwall sufficient surplus capital available for extensive mining adventure, hence the necessity for capitalists from the great centres of commercial wealth to co-operate in the enterprise of laying open the mineral treasures of the county.
Mining Offices, St. Day, Cornwall, Jan. 29. CHAS. BAWDEN.

[For remainder of Original Correspondence, see to-day's Journal.]

SALE OF AUSTRALIAN COPPER.—Messrs. James and Shakespeare held their great auction of Wallaroo copper on Tuesday, all the chief towns where the article is used—Birmingham, Liverpool, Glasgow, and all the continental centres—being fully represented. The attendance was good. Mr. Kenneth Harries James, of the firm of James and Shakspeare, of Liverpool and London, was the auctioneer in the first sale. Thereat was offered 802 tons of Wallaroo copper, consisting of 797 tons in cakes and 5 tons in ingots. The prices realised were considerably less than on the previous sale; but the large copper industries have been sadly depressed of late, in consonance with other departments of trade. From the auctioneer's introductory remarks, by this very large sale it would seem that the importers' stock consists of 1790 tons of cakes. and of 81 tons of ingots, and that the total stocks of copper in London on Jan. 15 were 6015 tons. Starting with the first sale of 802 tons of Wallaroo copper. the biddings were somewhat languid, and began considerably under the range of last sales, or even the open market price. Lot 1, consisting of 10 tons cake, ex Collingrove, started at the ridiculously low price of 60*l.* 3s., and ultimately knocked down to Mr. George Smith at 65*l.* 7s. 6d. Mr. Brandies was the purchaser of the next two lots at 65*l.* 5s. Mr. Merton became the purchaser of lot 4 at 65*l.* 5s. Mr. Strauss took Lot 5 at 65*l.* 5s. Mr. Brandies Lots 6, 7, 11, 12, and 15, all of 10 tons each, at 65*l.* 2s. 6d.; while Mr. Strauss and Mr. Merton divided the other lots at 65*l.* 2s. 6d. The lots ex Brilliant, from Wilson's wharf, were chiefly disposed of at 65*l.* 2s. 6d., Messrs. Strauss, Brandies, Gallimore, Eppenheim, and Merton being the buyers. It should be stated with regard to this consignment that Nos. 26 and 28 went at 64*l.* 17s. 6d. After this sale the lot ex Bundaleer was offered, and low bidding became the order of the day. The first nine lots were disposed of to Messrs. Schwann, Strauss, Merton, and Brandies; Messrs. Strauss taking 50 tons, the price being 64*l.* 17s. 6d. Mr. Brandies then secured Lots 38, 39, and 40, of 10 tons, at 64*l.* 15s. Mr. Merton then took Lot 41 at the same figure; Mr. Strauss following on with the purchase of Lots 42 and 43 at the same figure. The same buyer secured Lots 44 and 45 at 64*l.* 12s. 6d. Mr. Merton, Mr. Eppenheim, and Mr. Brandies secured the next three lots at the same rate; and, failing to bid for the succeeding lots, Mr. Strauss took up the running, and went from Lot 49 to 61 at the previous rates. The remaining lots, from 62 to 82, were purchased by Messrs. Gallimore, Strauss, Rickards, and Brandies, at prices ranging from 64*l.* 12s. 6d. to 64*l.* 17s. 6d. At the conclusion of the foregoing catalogue, Messrs. Fry, James, and Co. offered 220 tons or Burra Burra cake and ingot copper, which was taken up by Messrs. Strauss, Rickards, Walff, Lazarus, Merton, Mendel, and James and Shakspeare, the lowest bid being 61*l.*, the first transaction at 64*l.* 2s. 6d.; a few lots went at the latter price. Messrs. Merton took the last nine lots at 63*l.* 15s.

CHEMICALS, MINERALS, AND METALS.—Messrs. J. Berger Spence and Co. (Jan. 25)—Alum: Loose lump, 6*l.* to 6*l.* 2s. 6d.; ground, 6*l.* 10s.—Arsenic Best white powdered, 9*l.*—Borax: Refined, English, 38*l.*—Copperas: Green, 52s. 6d.; white, 8*l.* 7s. 6d.—Copper: Sulphate, 18*l.* 5s. to 18*l.* 10s.—Nitrate of Lead, 31*l.* 5s.—Saltpetre: Refined English, 25*l.*—Sulphate of Zinc, 12*l.* 12s. 6d.—Sulphur: Roll, 8*l.* 15s.; flowers, 10*l.* 15s.—Tin crystals, 5½d. per lb.—White Lead, 21*l.* to 22*l.*—Barytes: Carbonate, 100s.—Brimstone: Best thirds, 4*l.* 17s. 6d.—China-Clay, 38s.—Oxide of Zinc, 22*l.* 10s.—Talc, 5*l.*—Umber, 70s.—Charcoal: Best stick, 4½d. per bushel; field burnt, 6d.—Globe Steam-Boiler Powder, 16s. per cwt.—Naphtha, 60 per cent., 3s. 6d.

HOLLOWAY'S OINTMENT AND PILLS.—During every break of wintry weather exertions should be made by the afflicted to recover health before unremitting cold and trying storms set in. Throat ailments, coughs, wheezings, asthmatical affections, shortness of breath, morning nausea, and accumulations of phlegm can readily be removed by rubbing this fine derivative ointment twice a day upon the chest and neck. Holloway's treatment is strongly recommended with the view of giving immediate ease, preventing prospective danger, and effecting permanent relief. These all important ends his ointment and pills can accomplish, and will surely prevent insidious diseases from fastening on the constitution to display themselves afterwards in those disastrous forms that will probably embitter life till death itself is almost prayed for.

Meetings of Public Companies.

HORNACHOS SILVER-LEAD MINING COMPANY.

The fifth ordinary general meeting of shareholders was held at the Cannon-street Hotel, on Monday. In the unavoidable absence, through domestic affliction, of Mr. Alexander Parisot, the Chairman, the chair was occupied by Mr. W. D. ANDERSON.

Mr. WILLIAM BATTYE (the secretary) read the notice calling the meeting; the report and accounts were taken as read.

The directors, in their report, say the total sales of ore in the twelve months ending Dec. 31 last amount to 463 tons 3 cwts. 3 qrs., of the gross value of 13,543*l.* 11s. 8d., and there is a further quantity of 40 tons in the hands of the smelters and on the way estimated to produce 1120*l.* The average gross price of the Descuidada ore has been 29*l.* 1s. 2d. per ton, and that of the Afortunada ore 30*l.* 14s. 1d. per ton. This falling off is due to the continuous and heavy decline in the value of lead and silver. It is satisfactory to state that the mineral from the Descuidada Mine maintains its richness in silver, whilst that from the Afortunada Mine fully bears out the estimates, and dressed to 60 per cent. for lead gives upwards of 150 ozs. of silver per ton of mineral. A considerable delay has taken place in the erection of the machinery at the Afortunada Mine, which was only completed in June last. This work has proved itself much heavier, both as regards time and expense, than was anticipated; but due allowances must be made for the difficulties of carrying out such work in a part of the country devoid of all resources, coupled with a scarcity of skilled labour, delays of transport, and many other minor disadvantages. The directors are glad to say that the machinery at this mine, as also that at the Descuidada Mine, is reported by the managing engineer to work to perfection, both on the dressing floors and in all other departments, and that all mistakes which so frequently occur in putting up works of this description have been judiciously avoided. The shipments of ore have been unavoidably retarded—firstly, by the delay in the erection of the machinery at the Afortunada Mine; and, secondly, by the severe drought of last summer, which, drying up all available supplies of water, caused a stoppage of several months duration in the dressing operations. Although the returns of ore for 1878 fall far short of the estimates given by Mr. Homedes in his report of Dec. 28, 1877, this must in no wry be attributed to any diminution in the productiveness of the mines, but is due entirely to exceptional causes which no longer exist, and the directors believe that no further stoppages need now be apprehended. A considerable amount of underground work has been done at both mines, in sinking the shafts and opening out the levels in a systematic manner, and in the permanent interests of the undertaking. This work, together with the completion of the machinery and buildings at Afortunada, and sundry additions at Descuidada, has necessitated a very large outlay, the bulk of which properly belongs to capital account. The directors are satisfied that this expenditure has been judicious, and will be found of advantage in the economical working of the mines hereafter; but, in view of the smaller returns of ore last year than they relied upon, they found themselves under the necessity of providing money for the company's requirements to meet payments for machinery, purchases of stores, and other pressing engagements. The directors are of opinion that in order not to unduly delay the payment of dividends, and to put the company in a satisfactory financial position, it is necessary to pay off these liabilities by the issue of 2000 additional shares. The directors have reason to believe that the mines have now entered into a paying condition and that, provided their recommendation of paying off the existing liabilities be adopted, they will be in a position to commence paying substantial dividends in the course of the present year. A vacancy having occurred in the direction, consequent on the retirement of Mr. Henry Gielgud, the directors have elected Mr. Archibald Arrol, of Glasgow, to a seat at the board, believing that his experience of mining in Spain, as a director of the Tharsis Company, might prove of advantage.

The CHAIRMAN formally moved the adoption of the report and accounts, and said the report was so full, and so full of detailed explanations, that any remarks were almost unnecessary. He should, however, be happy to answer any questions which any shareholder might wish to put.——Mr. J. R. FREWER seconded the resolution.

The CHAIRMAN said that a short time since he visited the mines and spent a week there, and Mr. Homedes, the manager, was only too glad to see any number of competent mining engineers, and show them over the mines, being convinced that they would go away perfectly satisfied with what they saw. Several mining engineers had inspected the mine, and their reports were very favourable regarding the condition and prospects of the mine. He himself went over the mines, and saw the mineral in both the mines. At the Descuidada Mine the machinery was erected, and in good working order; at the Afortunada Mine the machinery was only partly up when he was there, which was in March, but it was expected to be completed in six weeks from that date, and at work; but it was not completed till the month of June. Then, in consequence of the severe drought, the water in the river, which ran about a quarter of a mile distant, became very low. This water was utilised by the company for the dressing-floors, and for other purposes; but, owing to the drought, the authorities declined to allow the company to take the water for some time, fearing the inhabitants would have no water to drink, and, therefore, the machinery at the mine did not really get to work till the beginning of November. In that month they had 30 tons of ore from the mine. In December there was a partial stoppage, but now the Afortunada Mine was in full work.

The resolution for the adoption of the report and accounts was then put and carried without any discussion.

The CHAIRMAN said that during the year Mr. Gielgud, one of the directors, had retired, and in his place the board had elected Mr. Archibald Arrol, of Glasgow; that gentleman had been elected at the desire of several large shareholders in Glasgow, who wished him to be on the board. He might mention that Mr. Arrol was a director of the succesful Tharsis Company, and he believed they could not have a better man. He moved that the election of Mr. Arrol to a seat at the board be confirmed.——Mr. H. KILBY seconded the resolution.

A SHAREHOLDER asked why Mr. Gielgud retired?——Mr. GIELGUD said he retired in consequence of other engagements preventing his giving proper attention to the affairs of this company.

A SHAREHOLDER asked whether Mr. Arrol, who lived at Glasgow, was able to attend the meetings of the board?——The CHAIRMAN said that Mr. Arrol could not promise to attend every meeting, but he would attend as often as he possibly could. A great many shares were held in Glasgow, and the shareholders wished to be represented on the board; as he had said, Mr. Arrol was connected with a large and successful mine, and he believed they could not have elected a better gentleman to fill the vacancy.

The resolution was then put and carried.

The CHAIRMAN proposed the re-election of Mr. Thomas Barker, which was seconded by Mr. W. GLYDON, and carried.

The CHAIRMAN moved the re-election of Mr. William Glydon, which was seconded by Mr. FREWER, and carried.

The auditor, Mr. T. Evans, was re-elected, with a remuneration of 20 guineas.

The meeting was then made special, for the purpose of passing the resolutions contained in the notice calling the meeting.

The CHAIRMAN formally moved the first resolution, which was as follows:—

"That the capital of the company be increased from 80,000*l.* to 100,000*l.* by the creation of 2000 shares, of 10*l.* each, calls in respect of the same to be made at the discretion of the directors, and that such shares be offered in the manner following:—Firstly. *Pro rata* according to the Articles of Association. Secondly. *Pro rata* to such shareholders as shall have applied for the first allotment. Thirdly, That all shares remaining from the second allotment be apportioned at the discretion of the board."——Mr. FREWER seconded the resolution.

The CHAIRMAN said the reasons for bringing forward this resolution were patent in the report. All the machinery had now been erected at both mines, and had been paid for. If they could have got the Afortunada Mine working in May the directors would not have called upon the shareholders to increase the capital; but, from the delay of the Belgian makers in sending out the machinery, and the want of water, the returns of ore were so long delayed that it was necessary to find means, and those means were found by the directors, who advanced the money, and especially by Mr. Parisot, who on all occasions had done what he could, and had found large sums of money to provide the means. But it was scarcely fair to ask the directors to advance more money, and now that everything was complete they came before the shareholders and told them precisely how matters stood. If the shareholders wished it the directors would pay themselves out of profits, which he had no doubt would commence at once; but if the shareholders preferred to take up the new shares he had no doubt that the directors would be able to distribute something upon the capital in six months; what that something would be he could not say. They had that day received a report from Mr. Homedes, who promised about 1100 tons of mineral from the mine this year. If they got 1100 tons in the present year, and there was no reason why they should have less, that, even at the present price, would be 30,000*l.* They would observe that the sales of ore at the Afortunada Mine had turned out as well as had been expected. There had been during the past year an enormous decrease in the value of both lead and silver. Silver, which used to be 5*s.* and 5*s.* 1d. per ounce, was now about 4*s.* 2d., and lead, which was 21*l.* per ton, was now about 14*l.*; therefore, this company was suffering, like its neighbours, from this cause. There was no help for that; but if they got only a fair price per ton they wou'd at the end of the year have a considerable surplus, so as to pay a dividend upon the capital, even if that capital were increased to 100,000*l.* When he was at the mine last year Mr. Homedes had as second engineer a gentleman who was a Government servant—a young man to whom the company paid a salary of 20*l.* per month. Recently that gentleman was recalled by Government, and the company had filled his place with an Englishman at the same salary, who would probably prove as good or a great deal better, who came from the Linares Mine with the highest recommendations. He had no doubt that this gentleman when fully at work would stir them up, and work the thing with great energy. Mr. Homedes, who was a man of position and of the highest character, had really done everything he possibly could; but, owing to the character of the country, he was subject to frequent fevers, and he hoped this English gentleman would carry a little English energy with him. For his own part, he had every confidence in the future of the mine.

A SHAREHOLDER said it would be satisfactory to the meeting to hear from the Chairman that this would probably be the last appeal to their pockets.

A SHAREHOLDER expressed an opinion that the expenses of management were somewhat high, and said he hoped the directors would do all they could to keep them at as low a figure as possible.

A SHAREHOLDER said he thought it would be satisfactory to the shareholders if meetings were held half-yearly instead of yearly.

The CHAIRMAN, in reply, said he had no doubt this was the last time the directors would have occasion to call upon the shareholders for money. As to the expenses the directors were fully alive to the necessity of exercising the utmost economy. He hoped in the current year the cost of the freight of fuel (which was a very considerable item) would be largely decreased owing to the opening of a new railway station nearer to the mines. In every other respect the directors would do all in their power to economise. As regarded half-yearly meetings if a dividend were declared at the end of the current six months a meeting must necessarily be held. If the shareholders wished future meetings to be held half-yearly it was a subject which the directors would take into consideration if the shareholders left it in their hands.

A SHAREHOLDER suggested that monthly reports of the condition of the mine and the returns of ore should be published in the *Mining Journal*.——The CHAIRMAN said the suggestion should receive the attention of the directors.

The resolution was then put and carried.

The CHAIRMAN then moved the following resolution:—"That the directors be and they are hereby authorised to issue fresh or renewed debenture bonds from time to time, in place of bonds drawn or to be drawn for repayment, so that the total debenture debt of the company shall not at any time exceed the principal sum of 10,000*l.*, and so that the rate of interest on such bonds shall not exceed 10 per cent." He explained that out of the 10,000*l.* debenture bonds which were issued 2000*l.* had been paid off, and the directors were simply taking power to reissue that 2000*l.* if necessary.——Mr. KILBY seconded the resolution, which was put and carried.

Mr. FREWER said that a meeting would have to be held to confirm the resolution. It would be called at the office, and the shareholders would receive due notice of the date on which it would be held.

A cordial vote of thanks was then passed to the Chairman for his conduct in the chair.——The CHAIRMAN, in acknowledging the compliment, said that the directors, who had advanced about 14,000*l.*, were willing to take repayment in cash, shares, or debentures; and Mr. Parisot, who was the largest holder, was willing to do the same.——The meeting then broke up.

BODIDRIS MINING COMPANY.

The annual general meeting of shareholders was held at the offices of the company, Coleman-street, on Monday,

Mr. A. W. THOMAS in the chair.

Mr. R. CUMMING (the secretary) read the notice convening the meeting, and the minutes of the preceding meeting, which were confirmed. The following reports of the directors and agent were taken as read:—

At the last annual meeting of shareholders, held on Jan. 26, 1878, the financial statement showed an unexpended capital of 731*l.* Since that date the full expenditure of the company on the works and establishments has amounted to 1723*l.*, leaving a balance in favour of the company of 559*l.* The manner in which this expenditure has been made will be found hereinafter mentioned. The directors have the satisfaction to put before the shareholders a more favourable state of the company's position than at the last general meeting, as they are enabled to report a very greatly advanced state of the actual mining operations. The experience of those interested in the practical development of mineral property shows that until a proper expenditure of time and capital has been made in laying open in depth and extent the levels or main arteries of a mine, erecting sufficient buildings at surface, and providing machinery for pumping and drawing purposes, the property cannot be considered in a really efficient state. In addition to the above, there are the necessary appliances for returning the ore to market. These consist of reservoirs, water courses, dressing floors, materials, and other indispensable but costly necessaries at surface, which must be provided before an undertaking of this kind can be fairly pronounced to be in thorough working order. The directors are pleased to be able to state that this has now been accomplished, and consider that the past year's outlay has been most economically and judiciously expended.

The underground operations will be found fully described in the report of the local manager, presented at the meeting, but to render them perhaps a little more concise and intelligible to the majority of shareholders who may not thoroughly understand practical details, it is as well to state that the metallic veins so far developed by the Bodidris Company contain their riches in increased quantities in depth, and that the deposits of lead ore in those veins make an easterly indication or dip from the point whence exploring operations were first commenced. This could only have been proved by actual development, and it has, therefore, been necessary for the permanent establishment of a profitable mine to sink a new engine-shaft in the eastern part of the property, and place there a steam-engine of sufficient power for all working purposes. This engine and engine-house are now completed, and the shaft already sunk to a depth of 55 yards from surface. The courses of lead ore discovered by the 45 yards level were found to be dipping eastward below the level; thus it will be seen that in sinking this eastern shaft a few fathoms further it will enter and thoroughly lay open the resources of the mine, so far as proved by hitherto operations.

As the chief discoveries have up to this period been made at the 45 yards level, where they could not be economically worked without the assistance of the eastern shaft above referred to, the manager has not made returns of lead ore therefrom other than that yielded by the explorative drivages, and which now results in from 30 to 40 tons of ore, worth between 300*l.* and 400*l.* The cost of the steam-engine was included in the last financial statement, so that the expenditure of the past year has been mainly devoted to actual labour cost, chiefly underground, therefore it is with great satisfaction that the directors are enabled to state that the mine is now in a thorough working condition, and that they trust to make important sales of ore before the next general meeting. The agents' report gives the number of fathoms explored during the last 12 months, and particulars of the general work including that of making a proper approach to the mine by a new road, which, though expensive, is absolutely necessary for the carriage of materials and machinery. In conclusion, the directors congratulate the shareholders on their present position, financially and otherwise, and for the future feel confident that at the next annual meeting they will be able to show important and profitable results.

Jan. 22.—The following is my report of our operations at this mine for the last 12 months:—It will be remembered that at this time last year we were driving a cross-cut at the 60 yard level in a southerly direction to intersect a parallel east and west lode, and were about expecting to meet with it. Since that time the lode has been cut and opened upon altogether about 16 fms. in height and breadth. It is found to be a masterly lode of great width, and productive of good quality lead and blende ores, but not of sufficient yield to be profitably worked at the present depth. At the same time the work achieved is of considerable value, as we have ascertained the exact position and course of the lode, and proved that from every indication presented it is only necessary to explore it to a greater depth to find it very remunerative. Upon the chief or middle lode the 45 yard level has been driven east 16 fms.; the lode has varied in size and productiveness, but in the last few fathoms has assumed a much improved appearance, is fully 3 ft. wide, and yielding both lead and blende ore. Finding as the result of driving the 35 and 45 yard levels that all the ore deposits had an eastern dip, it became a question whether or not it was advisable to sink a new shaft in our eastern ground, and so go down to meet them. This policy, I am glad to say, was approved by the board, and every means have been taken to expedite the work. The new shaft has been sunk 55 yards from surface, cased, divided, ladder way put in, and in every way completed. Our steam-engine previously purchased has been erected at the mouth of this shaft, and all is in complete working order. In the progress of sinking this shaft, which may be considered just now the pioneer operation, we have had considerable success, as we find the lode larger and more productive as we go down upon it; it has also proved that the runs of ore seen in our 35 and 45 yard levels continue in depth, and have in no way decreased. With a moderate outlay, and since your last meeting, a new and valuable road has been made to the mine communicating with the chief country road, an engine-house has been built, other surface erections have been completed, and the mine put generally on a proper footing and working condition. The new engine works very well, and is fully adequate for our purposes. With regard to returns of ore, no attempt has been made to bring to market that which we have discovered, as until the eastern shaft is deeper than it now is it cannot be economically broken and brought to surface. The ore produced by the 35 and 45 yard levels in driving has been already to some extent prepared for market, and the quantity underground and at surface is between 30 and 40 tons. In conclusion, I may safely say our progress has been extremely satisfactory, we have had no hindrances, we have found that our riches whatever they may prove to be are undoubtedly in the eastern part of our sett, and we are steadily working in that direction. I hope and certainly believe with the best of prospects.—H. HOTCHKISS.

Mr. FORBES said there were one or two items in the balance-sheet which he thought it would be rather desirable that the shareholders should have some more details of. In the first place, he would ask what was the meaning of the item of cash due to the company, 646*l.*

The CHAIRMAN replied that that amount was due for shares applied for, but not yet taken up. People had purchased shares, but they had not yet wholly been allotted, as the amount due for them had not been paid.

Mr. FORBES said on the other side of the account there was an item of 2*l.* 10*s.* for calls in arrear.——The SECRETARY, in reply, said that was the amount actually in arrear on the shares allotted, but the other item was due on shares applied for, and not taken up.

The CHAIRMAN added that a lot of shares had been taken by two or three gentlemen, and the amount outstanding was at call as the company might require. The shares were never issued until the actual payment for them was received. So far the company had not required funds, and they had not applied for the amount due.

Mr. A. ENDEAN said he had agreed to take 2000 shares, and he considered himself fully indebted for those that he had not at present taken up. He was quite prepared to do so, however, whenever the funds were required.

Mr. FORBES asked what the commission on shares sold referred to?——The CHAIRMAN replied that that referred to the shares sold for the commencement of the company. The balance sheet embraced the whole of the expenditure of the company from the commencement to Jan. 13.

Mr. FORBES asked what the item of materials at the mine represented?——The CHAIRMAN said that was for materials used at the mine, such as candles, timber, fuses, &c. With regard to the ore at the mine, in the report it was stated that they had between 300*l.* and 400*l.* worth of lead; the greater part of that was dressed and ready for market, but the price of lead had been unfortunately so low, and the company not having been in want of money, it had been thought better to wait for better times. He had been told by good authorities that there was every reason to believe lead would soon be considerably higher.

Mr. FORBES asked what was the value of the lead at the present price?——The CHAIRMAN replied about 300*l.* or 400*l.* Unfortunately, immediately after the last general meeting the price of lead began to fall, and it had subsequently declined 20 or 30 per cent.; but he hoped and believed they would soon see an improvement. With regard to the working of the mine, it had been pointed out in the report that, in consequence of the depressed state of the lead market, the directors had decided to economise in their workings to the greatest possible extent, having due regard to the proper exploration of the property. With that intention a new shaft had been sunk from the surface to meet the run of ore which was discovered previously in the 45 yard level, and this shaft was now down to a depth of 55 yards from surface, and was now within 1 or 2 fms. of this course of ore. When the shaft reached this point it was expected that a valuable piece of ore ground would be laid open. The shaft was now down 5 fms. below the 45 yard level, and it was just upon entering the course of ore. In sinking the shaft another run of ore had been discovered; it was not a very long one, but some very profitable ground had been opened on; and when lead advances in price they would be able in the 45 yard level to get into the run of ore already passed through in the shaft.

Mr. FORBES asked how far the company's ground extended in the direction of the lodes?——The CHAIRMAN said about 1¼ mile; that was the position of the mine at present. They had just commenced to get into the run of ore, and the whole of the explorations were in a forward state. The only thing to be regretted was the low price of lead, and, in fact, in consequence of this it had not yet been found desirable to send any ore to market.

Mr. BARTLETT asked whether the company had any liabilities?——The CHAIRMAN replied that they had no liabilities whatever beyond the current month's costs.

Mr. BARTLETT did not think the balance sheet represented the true position of the company. The ore dressed for the market should certainly be put down as an asset. He also suggested that the balance-sheet should state that it represented the receipts and expenditure from the commencement of the company.

The CHAIRMAN, in reply, said he agreed with Mr. Bartlett's suggestions, which would be borne in mind in preparing the future balance-sheets. He (the Chairman), in reply to another question, said they were quite prepared to pay the balance of 410*l.* due on the purchase of the mine when it was found to whom the money should be paid.

Mr. BARTLETT asked what was the nature of the ground in sinking the new shaft?——The CHAIRMAN replied that it was everything that could be desired for the production of mineral, but unfortunately it was rather hard. They would soon, he hoped, get through this; but as far as the matrix of the lode itself was concerned it was extremely fine, and it was in the same measures that produced such great riches in the mines to the north—the Westminster property. They were approaching the shale beds, under which the Westminster mines yielded such rich returns, and he believed that in 10 or 15 fms. deeper the lode would prove to be very rich. It was now about 3 ft. wide, as compared with a few inches when it was discovered.

Mr. BARTLETT was glad to find that the lead had not been sold, and he quite endorsed the remarks of the Chairman as to the probabilities of an early advance in the price of lead.

On the motion of the CHAIRMAN, seconded by Mr. DENTON, the reports and accounts were unanimously adopted.

Mr. GREGORY proposed, and Mr. ARTHUR seconded, the re election of Mr. Metcalfe as a director; and on the motion of Mr. DENTON, seconded by Mr. ENDEAN, the auditor was reappointed.

Mr. BARTLETT said, being interested in a neighbouring mine, he had several times visited the Bodidris property, which he had minutely inspected underground and at surface, and he was fully satisfied with the careful management the property was receiving. He believed that within a very short time they would be able to bring large returns of lead to surface, and that it should be treated as economically as possible. He was very glad to see that an engine had been fixed at the new shaft, as it had been stated by those better acquainted with the district than he was that the prospects in the direction were exceedingly good, and he thought these prognostications were likely to be fulfilled. Of course, the great thing they had to fight against was the price of lead, and though he was, as a rule, adverse to mining companies stocking their produce, he thought this course had been wisely adopted in this company, which had a good bankers' balance, and was in no need of funds. He thought the prospects of the company were very good, and he hoped that by the next meeting the shaft would have attained a sufficient depth to develope the rich deposits of ore, which promised to be more extensive and he hoped more profitable in depth. (Hear, hear.)

Mr. GREGORY, who said he was a very large shareholder in the company, had also visited the mine, and was very well satisfied with its appearance and with the general management, the agent being a most intelligent practical miner, who thoroughly understood his work, and who had devoted considerable energy to the exploration of the mine. He had little doubt that in the next month or two a considerable rise in lead would take place; but at present it would be folly to incur expense in breaking down and taking out the lead. Another important feature was that their ground was precisely similar in character to the celebrated Minera Mine—one of the most prosperous mineral properties ever opened, yielding as it had done something like 60*l.* or 70*l.* on each 5*l.* share. He was very glad to find the financial position of the company so satisfactory, and although he was already interested in the company to the extent of between 2000*l.* and 3000*l.*, so long as the concern went on as well as it did at present, and its management was the same, he would be quite willing to take another thousand shares if the company required any funds. He believed they had as great a prize in Bodidris as Minera had been, and that it only required a moderate outlay and patience to render it profitable.

The CHAIRMAN also expressed his firm belief in the future of the company, and hoped that they would be as successful as Minera had been.

On the motion of Mr. ENDEAN, seconded by Mr. DENTON, a vote of thanks was passed to the Chairman; and the CHAIRMAN having briefly returned thanks, the meeting terminated.

DENBIGHSHIRE CONSOLIDATED MINES.

The ordinary general meeting of the shareholders was held at the offices of the company, Great St. Helen's, on Wednesday,

Mr. FRANCIS RUDALL in the chair.

Mr. E. J. BARTLETT (the secretary) read the notice convening the meeting, and the minutes of the preceding general meeting, which were confirmed. The reports were as follows:—

The directors have pleasure in submitting the annual balance sheet made up to Dec. 31 last, together with the agents' report, which they have no doubt will be perused with satisfaction. Further expenditure on capital account has been incurred during the past twelve months upon the permanent levels, and it is satisfactory to note that the 112 west seems on the point of entering one of the runs of lead proved in the adjacent property, and that in a short time large quantities of lead ore may be obtained therefrom. The eastern driving still continues a costly operation. During the year the managers have had opportunities of consulting experienced authorities upon the prospect of meeting with the east and west vein referred to in previous reports, and it seems probable that within a distance of 20 yards this great object will be attained. A number of the shares issued at the last meeting have been disposed of at enhanced prices, and the directors propose to apportion the remainder (1924) to the present shareholders only, *pro rata*, at 1*l.* per share. The directors believe this will be sufficient to accomplish the objects in view. During the past year the board have had the pleasure of electing Capt. J. C. Addison to the seat vacated by the resignation of Mr. J. Vickers, and he and Mr. T. F. Gamble, who retire by rotation, offer themselves with the auditor, Mr. A. Conder, for re-election.

Jan. 8.—Our anticipations regarding the 66 west have to a great extent been realised during the past year. A sump has been sunk to a lower level, which we now term the 80 west, and as a proof of the value of this part of the mine, we may state that for the last four months it has paid a considerable profit to the company over and above all charges. In order, however, to lessen the cost of production so as to meet the great reduction in the price of lead we shall commence at once to cross-cut from our 112 west to intersect the lode; this operation we expect to accomplish six weeks hence, when we should meet with the run of ore worked above, which undoubtedly will have improved in depth. At Parry's we have driven the level to the bottom of the old sump, where we met with some very fine ore, and as soon as lead advances we shall set this point to the tributers. With regard to the eastern end operations at the commencement of the year were confined to rising in one or two places to prove the value of the ore left in the roof and get into the shallow runs which had been worked above; varied success resulted, and the ground proving extremely hard it was found that operations could not be carried on remuneratively with lead at its present low price.

During the year our 112 level east has been further extended for a distance of 40 yards, without exhibiting any marked change until very recently. The lode is now a most powerful one, well defined, and about 4 ft. wide; we feel sanguine that when we enter the productive beds which lie between our position and the coal measures substantial and gratifying results will be obtained. The 112 west has been urged forward, and now presents a very promising appearance. We attach particular importance to the extension of this level from the fact that we are entering upon those productive runs which proved so rich in Cat Hole and Glan Alun, and also that there are other proved lodes converging towards the west, which should be intersected very soon, when great and lasting results may naturally be expected. The general progress has been satisfactory, and we believe that we shall, during the present year, reap the advantage of the outlay expended upon this great property.—RUPERT PRINCE, A. FRANCIS.

The CHAIRMAN said he would not detain the shareholders many minutes, because it had always been their practice to place all the particulars of the operations of the company in the reports issued to them; but at the same time he would be very happy to answer any questions which might be put as to the working of the mine. Mr. Bartlett had recently visited the mines, and in conjunction with the managers had gone through the different levels and workings, and he (the Chairman) would presently ask that gentleman to explain the position of affairs. With regard to finances, the shareholders would recollect that at the previous meeting they had to adopt the rather extraordinary course of issuing shares at some reduction in order to provide the necessary capital, and but for the extraordinary drop in the price of lead, he had no doubt they would have gone on very well. Some of these shares had been reserved, and it was now considered that the position and prospect of the company were such that the shares should not be issued under 1*l.* each. He hoped the shareholder would take as many of these shares as they could, for they fully believed that the workings in the 112 west could be made to pay, even at the present price of lead, when they were a little further developed, and that development would be accomplished in a very short time, when the workings there would at once become profitable. As the secretary could tell them more about the prospects of the mine than he could, he would without further preface move "That the balance-sheet, together with the directors' and agents' reports (taken as read) be received, adopted, passed, and allowed."

Mr. BARTLETT said regarding the eastern portion of their property it would be recollected that at the meeting of the company in January last it was decided to discontinue the driving the permanent level—the 112 east—and that the men should be placed in the roof of the level to reach the shallow runs of ore, which yielded large returns to the former proprietors. In referring to the report now circulated with the balance-sheet it would probably strike a great many that the statement appearing therein that this level had been further extended for a distance of 40 yards required some explanation. The manager endeavoured to explain this by stating that the driving of the level had been continued in consequence of the fall in the price of lead, and the rise discontinued in consequence of the hardness of the ground; but one important feature he seemed to have left out, which was that in rising up, the space being necessarily small, the ventilation after blasting was so injurious to the men that it was found to be impossible for them to work at that point. Before discontinuing this rise, however, it was thought desirable to get the opinions of those best acquainted with the district and with the character of the rock through which the drivings had been car-

ried, and the result was they were strongly advised that the driving of the 112 level should be continued, notwithstanding the expensive character of the operation, as it was believed the lode would be intersected in that direction, and that looking at the extremely productive measures in the adjacent mines, the character of the lode would be rich. The only marked feature in the lode for the distance driven was that the work of driving was easier than it had been, and that the lode itself was of greater width. It would have been noticed that a distance of 40 yards had been accomplished, whereas in the preceding year, notwithstanding the fact that the same amount of diligence was used in urging on the level, the men only succeeded in driving 30 yards, which proved that the ground was somewhat softer in 1878 than in 1877. In their report the directors had stated in reference to the prospect of meeting with the east and west vein referred to in previous reports that it seemed probable this great object would be attained within a distance of 20 yards. To explain this expectation it would be necessary to refer to the report of the last meeting of the company. It was then stated that the various points of operation in the old property had been cleared and examined in order to give them room to put a dial in and ascertain as nearly as possible where the Coed Fedw lode would be intersected in the 112 east. This work was proceeded with as far as possible without steam-power, and the result of the examination simply proved the existence of two parallel lodes, one within a certain distance of the other. The shareholders would also recollect that some time ago it was thought the Coed Fedw lode had been intersected in the 112 east, and some good ground was passed through, from which very fine specimens of lead had been raised—about a couple of tons. It was a little disappointing to find that this was not the Coed Fedw lode, but a branch or string of that lode, and it was anticipated that the main lode would be reached in about 20 yards from that point, as stated in the report of the directors. With respect to the 112 west it was stated at the last meeting that as soon as the operations then in progress at Parry's were finished it was intended to drive this level to meet with the junction of the various lodes intersected in driving it. The progress made had been most satisfactory, as the nature of the ground had not interfered with their progress, and the present indications were such as to lead them to believe they would soon intersect the runs of lead referred to in the agent's report. He had received information from reliable sources which led him to calculate that they were at present within 7 or 8 yards of a run of ore. These runs had proved very rich in the Glan Alun (their nearest neighbour) and the Cat Hole Mines. It would also be recollected that at the date of the last meeting some tributers had been placed to drive in the 66 yard level, where the expectations raised had since been fulfilled. From this point the lead sold had been raised, and the agents in their report referred to the considerable profit which had during the past four months been made by sinking a sump to a lower level. This sump had been sunk from the bottom of the 66, or small shaft, until it reached a depth of 80 yards; but winding the ore up some 20 yards, putting it into the kibbles, and getting it to surface, was a matter of considerable expense. It had, therefore, been found preferable to cross cut from the 112 west (which was a very convenient level, having a tramway) to the 80, and this when accomplished would give them a large quantity of ore to break down from the top of the lode. It was calculated that this operation would be finished by next week or the week after, when they ought to have something like 20 yards of backs to develope, which even at the present price of lead, he thought he might safely say, would yield a very satisfactory profit; so that, so far as the 66 and 80 were concerned, the anticipations held forth at the last meeting had been thoroughly fulfilled. He thought the course of lead at present to be seen in the bottom of the 80 would be a good sight for any practical miner, for in places it was nearly 1 ft. wide, of solid lead. (Hear, hear.) With regard to Parry's working, to which reference was made in the report in the following words:—"At Parry's we have driven the level to the bottom of the old sump, where we met with some very fine ore, and as soon as lead advances we shall set this point to the tributers." These were the only matters in the report that he thought required observation, but he would be happy to answer any questions the shareholders might wish to put. With respect to the decision come at the last meeting to issue shares at a small price, for sometimes those shares were not placed so easily as had been anticipated, but, so far as himself and the directors were concerned, they had done a great deal more than they promised at the meeting. Some of the shareholders who had confidence in the management had also taken double their proportion of these shares, but still a large balance remained unissued. If these shares had been fully taken up it would have enabled the management to do a great deal more than the present report indicated, but perhaps it was a good thing that the whole of the shares were not taken up, because during the latter part of the year several friends came forward, and gave advanced prices for the shares, which, of course, benefitted the company. There were some forfeited shares which it was desirable that the shareholders should take up, so that means should be provided to urge on the permanent levels, and enable them to produce and sell lead. He was confident that in the future they would be rewarded for every penny spent on the mine, and that they would reap the fullest advantages from the excellent manner in which the development of the property had been carried on. Unlike many other concerns, the directors of this company had never directly or indirectly received one penny for their services—(hear, hear)—and he had never taken his salary in cash. (Hear, hear.) He had during the year taken a large proportion of the debt due to him in shares, and he had also had to advance a portion of the 2229*l.* 10*s.*, the greater part of which was due to the general management. This was a sufficient proof that the object of the directors and himself was to develope the property, which he was as confident as a man could be of anything would one day occupy a splendid position in the market as one of the best lead mines in North Wales. With respect to the price of lead, which had so much frightened some people, he had evidence before him which enabled him to say with safety that lead had seen its lowest price, and, although a revival in trade would have to take place before any material advance in that metal could be expected, he expected that within the next few weeks there would be a rise of 1*l.* Having stated that during the year the directors and himself had even paid the office expenses out of their own pockets, Mr. Bartlett concluded by expressing his willingness to answer any question which might be put.

Mr. COOPER asked how much of the 2229*l.* was due to the secretary?—Mr. BARTLETT said about 1000*l.* The money for the shares came in in driblets.

Mr. BARTLETT, in reply to Mr. Cooper, said that shareholders forfeiting their holdings were still liable for the calls due on their shares, so that the company was an actual gainer by the forfeitures.

After a short conversation with regard to the condition of the American lead market, Mr. GINDER seconded the adoption of the report and accounts, and asked at what price the directors proposed to take shares in lieu of cash for their services?—The CHAIRMAN replied that they would take them at the same price as they were offered to the shareholders.

Mr. BARTLETT, in reply to Mr. Bland, said the shareholders would be informed immediately there was anything of importance to communicate to them, either as to discoveries or dividends.

A SHAREHOLDER said he could add but very little to what Mr. Bartlett had said with regard to the position and prospects of the mine. He had been called in to inspect the mine some time ago, and he found that the chief workings were confined to the western part of the property. He had made a thorough underground examination of the workings, and he had had some years experience in the district. This experience had taught him that in the carboniferous limestone formation all the best courses of ore were found in the eastern part of the limestone, under what were known by miners as the "shales." He found the shales very strong in this property, especially in the 112 east, which have been driven a considerable distance. In brok of this level there were some very nice steel-grey lead ore, which always indicated the presence of a strong body of ore close at hand. He had, therefore, advised the continuance of the eastern drivage, which had since been done. They were now driving on the Coed Kendrick vein, but he was quite sure that the junction of this and the Coed-y Fedw veins would shortly be met with, and that they would have a very fine course of ore. (Hear, hear.) He was also very much pleased with the western part of the mine, and the way in which the workings were being carried on. In his long experience of the district he had never seen better defined lodes or a property of greater promise than Denbighshire—(hear, hear)—and he believed that it would prove especially rich in the eastern part. He anticipated a rise in the price of lead, and that they had a great prize in possessing such a property. (Hear, hear.)

Mr. COOPER said that after the last meeting he took three times his proportion of shares, but he did not see why a few shareholders should have to put their pockets if those who did not do so were to receive equal advantages from the company hereafter. He had invested in the company largely, because he had the fullest confidence in the directors and secretary.

The CHAIRMAN remarked that every shareholder would have an opportunity of taking up his proportion of the shares, and if any then remained unapplied for they would be offered to, and he believed readily taken up by, the outside shareholders.

Mr. BARTLETT said he anticipated that before many months elapsed they would have substantial results from the mine, and he hoped the shareholders would do their duty in assisting the management by taking up their proportion of shares. A matter of 2000 shares was really a very small one, and the shareholders might remember that during the year the shares had changed hands at from 30*s.* to 35*s.*

The report and accounts were then unanimously adopted.

On the motion of Mr. CONDER, seconded by Mr. COOPER, the retiring directors—Captain J. C. Addison and Mr. T. F. Gamble—were re-elected; and on the motion of Mr. G. DRUMMOND, seconded by Mr. POTTS, Mr. A. Conder was re-appointed auditor.

Mr. GAMBLE and Mr. CONDER returned thanks, the latter gentleman remarking that the books of the company were kept in the most perfect manner of any mining company he had ever had dealings with. They were quite a credit to the office.

On the motion of Mr. GINDER, seconded by Mr. CONDER, a cordial vote of thanks was passed to the Chairman, directors, and secretary.

The CHAIRMAN in returning thanks said the directors had perfect confidence in Mr. Bartlett, who visited the mines periodically, and that any money received upon the shares would be devoted exclusively to the development of the mine.

Mr. BARTLETT also acknowledged the compliment, and remarked that he took 500 of the last issue of shares, and he would take even more than his proportion of the shares now offered. (Hear, hear.)

The proceedings then terminated.

EAST POOL MINING COMPANY.

A three-monthly meeting of shareholders was held at the mine on Tuesday,—Mr. R. R. BROAD presiding. There was a large attendance of adventurers. The agents are firmly of opinion that in East Pool they have a first-rate mine, and one that will when the good time comes pay large dividends. The accounts showed a profit of 1103*l.*

The CHAIRMAN said he was glad they had such a satisfactory report and statement of accounts. Eight weeks ago he felt confident that they would have as high a dividend that day as ever the mine had paid, but circumstances had transpired within the past four weeks which no one could forsee. They had had a reduction in the price of tin which, with the severe weather, and the stoppage of their bankers (the Cornish Bank), had placed them in a critical position. To the profit of 1103*l.* there should be added the balance from the last meeting of 26*l.*, making a total of 1129*l.* The committee recommended a dividend of 3*s.* per share, and to carry forward a balance of 169*l.*

Capt. S. WILLIAMS, of Camborne, said that in looking over the merchants' bills he saw that for tonite they were allowed 12½ per cent. discount, for dynamite 7½ per cent., and for lithofracteur 12½ per cent. As agent for lithofracteur, he wanted to know whether, as such a discount was allowed, more lithofracteur could not be used with advantage in the mine.

Capt. MAYNARD stated that with regard to explosives they had had lithofracteur brought into the mine as long as any mine in the county, and he had told the men they were at perfect liberty to take what explosive they wished. There was no one man in the mine who could say that he had restricted him as to what explosive he should use. The agent only gave the men notice that they were to use a certain quantity of the strong explosives and the remainder to be taken up in powder. He had never heard a great demand for lithofracteur. There might be other agents who might speak as to its good or bad qualities, but he had never heard anything said in its praise. If he (Capt. Williams) could induce the men to take lithofracteur they were willing to accept it, provided he could show that it was so strong as the other explosives. His hands were not tied by the committee or anyone else. He came into the mine as an independent man, and he always endeavoured to do the best for the adventurers.

Capt. MAYNARD stated, in reply to a question, that the loss of tin for the three months had been about 6 per cent. a very great decrease on the previous quarter.

Mr. RULE moved a vote of thanks to the agents, which was carried amid cheers, and Capt. BISHOP, in reply, advised the shareholders not to be too anxious about present dividends, but to look more to the future and to the proper development of the mine. With a view to this they were negotiating for a boring machine. He believed the mine was an extremely good one, and that in a few years, instead of a 2*s.* 6*d.* dividend they would have a 10*s.* one.

[For remainder of Meetings see to-day's Journal.]

FOREIGN MINING AND METALLURGY.

The Belgian Minister of Public Works has detailed to the Belgian Chamber of Representatives the motives which have induced him to propose an extraordinary credit of 240,000*l.* for the purposes of the Belgian State Railways. Of the sum named 80,000*l.* is for fixed plant, such as rails, iron bridges, crossings, turntables, &c.; the remaining 160,000*l.* is to be devoted to the acquisition of additional rolling stock. With the help of the last mentioned sum it will be possible to increase the effective rolling stock of the State system by 54 passenger and goods engines, 50 passenger carriages and vans, and 225 goods trucks of various kinds. The movement could not be more happily selected than the present for giving out this order, since the production of plates, rails, and merchants' iron has been reduced of late within the narrowest possible limits. An adjudication is to take place on Feb. 12 for iron sleepers for the Belgian State Railways.

As regards the Belgian coal trade, it may be observed that navigations have again been interrupted by ice, as they were during the second week of January. After the first frost the ice suddenly broke up, and a large number of canal boats were loaded, especially for France; the movement of these boats have since been stopped. Deliveries by railway have been rather increased than otherwise by this state of things, and have been made very regularly. The demand which has prevailed has principally related, however, to coal for domestic purposes; industrial qualities of coal have been a good deal neglected. Purchases of coal are being made for brick-burning purposes.

No improvement has taken place in the iron trade of the French department of the Nord, and prices remain at about the same level. Rolled merchants' bars first-class have made 5*l.* 12*s.* per ton in transactions of some little importance, and 5*l.* 16*s.* per ton in current affairs of less extent. In the Nancy district in the Meurthe-et-Moselle rough refining pig has been quoted nominally at 2*l.* 4*s.* per ton. Business has done at 2*l.* 3*s.* 4*d.* to 2*l.* 4*s.* per ton for lots for immediate delivery, but a disinclination has been exhibited to enter into contracts for lengthened periods. In the Loire-et-Rhone comparatively little business has been passing; only a few orders for plates have been received, and these have been of no great importance. The quotation current for ordinary iron in the Loire-et-Rhone is 7*l.* to 7*l.* 4*s.* per ton in warehouse at Lyons.

The administration of the French State railways has just concluded a contract with some English firms for the delivery of 54,000 tons of coal at 16*s.* 10*d.* per ton delivered at La Rochelle. The price named includes the duties payable. The quantity ordered almost represents the consumption of two years. The arrangements made for the delivery of this English coal have caused considerable irritation among French coalowners, who greatly resent the giving out this order to foreigners at a time when French coal miners stand in need of employment.

A native of Marseilles has purchased the right of extracting chlorate of potash from the Dead Sea, which he expects to be able to offer in London at 72*s.* a ton, whereas the present price of that article is 104*s.*

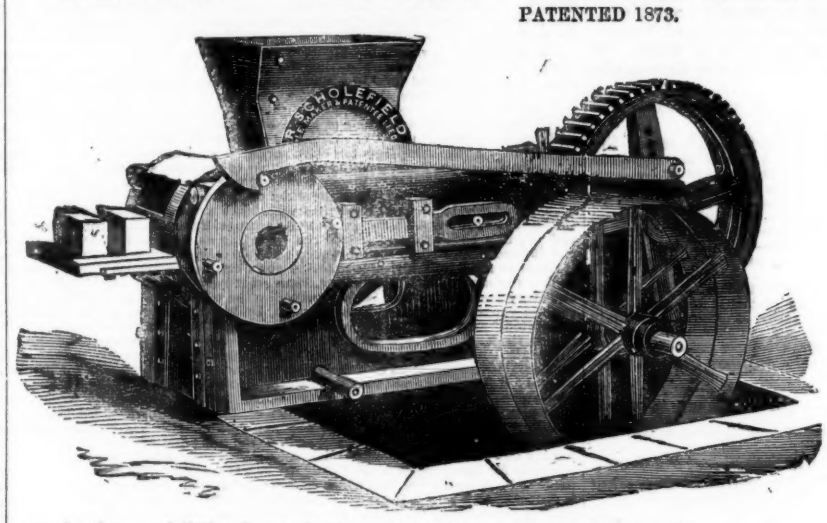
DIAMONDS IN CHINA.—M. Fauvel, who has lately been investigating the mineral wealth of the district of Shantung, gives some interesting particulars concerning the existence of small diamonds and the method of collecting them adopted by the natives. The stones are mostly very minute, varying in size from a millet seed to a pin's head, though occasionally larger ones are met with. One recently as large as a pea was brought to Cheefoo, and sold to a mandarin there. The mode adopted for collecting the diamonds is very curious. Men with thick straw shoes on walk about in the sands of the valleys and streams of the diamond mountains of Chinklangling, some 15 miles south-east of Yichow-foo. The diamonds, which are ragged and pointed, penetrate the straw, and remain there. The shoes are then collected in great numbers and burnt, the diamonds being searched for in the ashes. As is the case with amethysts and rock crystal in the Lao-Shan, the priests in the temples in the Chinkangling are the principal dealers in these small diamonds. From them they are bought by glaziers at the large fairs held every year at Chuchow, Laichow-foo, and Hwang-hsien. They are not to be found in shops, and are packed in quills.

THE AGE OF SEDIMENTARY ROCKS.—Mr. J. Mellard Reade has made a communication to the Royal Society on "Limestones as an Index of Geological Time." He believed that analogy lead us to regard the earliest materials as of the nature of granite and basalt. He calculated the average sedimentary thickness at one mile, and that one-tenth of the thickness of this is calcareous. The later strata of England are much more calcareous than the earlier, and this holds good for Europe. This was regarded as indicating an increase in lime available in the formation of sedimentary deposits, and it was pointed out that the annual depth of rain running off the granite and igneous rock areas is averaged at 28 inches, and the annual contribution of lime in the forms of carbonates and sulphates is 70 tons per square mile. From this Mr. Reade has calculated that the elimination of calcareous matter contained in the sedimentary crust of the earth must have occupied at least 600 millions of years.

WHEAL BASSET.—Mr. H. Waddington has issued a circular to the shareholders in Wheal Basset Mine, published in this issue, in the course of which he refers to the fault found with the management by Mr. R. H. Williams, and states that the gentleman in question, after inspecting the mine on Sept. 17 last, failed to recommend to the committee a single thing their manager had not previously advised; although he now asks for proxies for the coming meeting of shareholders. Mr. Waddington represents himself as the largest shereholder in the mine, and asks for proxies. He further states that the Messrs. Kennal Vale Company have also sent out circulars soliciting proxies for the winding-up of the mine. Mr. Waddington says they have received 5,000*l.* in dividends, and he offers to take their shares or the shares of any other adventurers who are prepared to give up, provided they will agree to pay their proportion of indebtedness up to the time of transfer. Mr. Waddington believes there is no mineral ground in the country to be compared to Wheal Basset and adjoining setts. His proposition is to divide the shares into 6000 at the next meeting, and authorise a call of 5*s.* per share quarterly, which "will see the bottom of the shafts at North Basset and will open a mine on the Great Flat Lode." There will, therefore, be three separate and distinct proposals for the next meeting to consider, each of them of importance, and likely to command a fair amount of support.—*Western Daily Mercury.*

R. SCHOLEFIELD'S
LATEST PATENT BRICK-MAKING MACHINE.

PATENTED 1873.



R. S. begs to call the attention of all Colliery Owners in particular to his PATENT SEMI-DRY BRICK MACHINE, and the economical method of making bricks by his patent machinery from the refuse that is taken from the pits during the process of coal-getting, which, instead of storing at the pit's mouth (and making acres of valuable land useless) is at once made into bricks at a very small cost, by R. S.'s Patent Brick-making Machinery. If the material is got from the pit hill, the following is about the cost of production, and the hands required to make 10,000 pressed bricks per day:—

2 men digging, each 4*s.* per day	£0	8	0
1 man grinding, 4*s.* 6*d.* per day	0	4	6
1 boy taking off bricks from machine, and placing them in barrow ready for the kiln, 2*s.* per day	0	2	0
1 boy greasing, 1*s.* 6*d.* per day	0	1	6
1 engine-man, 5*s.* per day	0	5	0
1 man wheeling bricks from machine to kiln, 4*s.* per day	0	4	0
Total cost of making 10,000 pressed bricks	£1	5	0, or 2*s.* 6*d.* per 1000.

(SETTING AND BURNING SAME PRICE AS HAND-MADE BRICKS.)

N.B.—Where the material can be used as it comes from the pit, the cost will be reduced in digging.

As the above Machinery is particularly adapted for the using up of shale, bind, &c., it will be to the advantage of all Colliery Owners to adopt the use of the said Brick-making Machinery.

THE MACHINES CAN BE SEEN IN OPERATION AT THE WORKS OF THE SOLE MAKER AND PATENTEE DAILY.

SCHOLEFIELD'S ENGINEERING & PATENT BRICK MACHINE WORKS.
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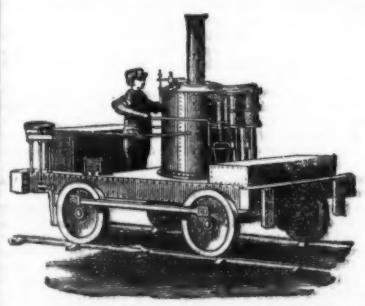

9 to 27-horse power. Can be made to suit any gauge from about 2 ft. upwards, and are specially adapted for steep inclines and quick curves. They are strong and simple in construction, and geared to draw very heavy weights in proportion to their power. A large number are successfully working at QUARRIES, GASWORKS, RAILWAY SIDINGS, &c.

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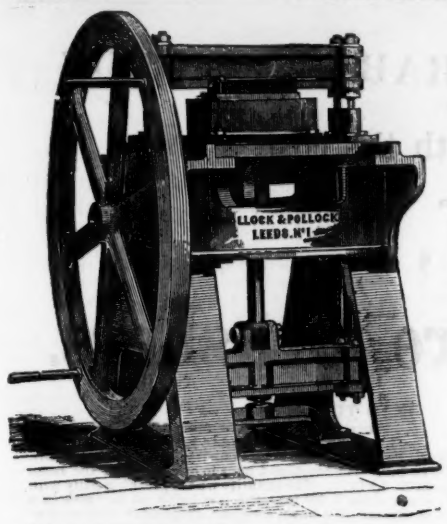

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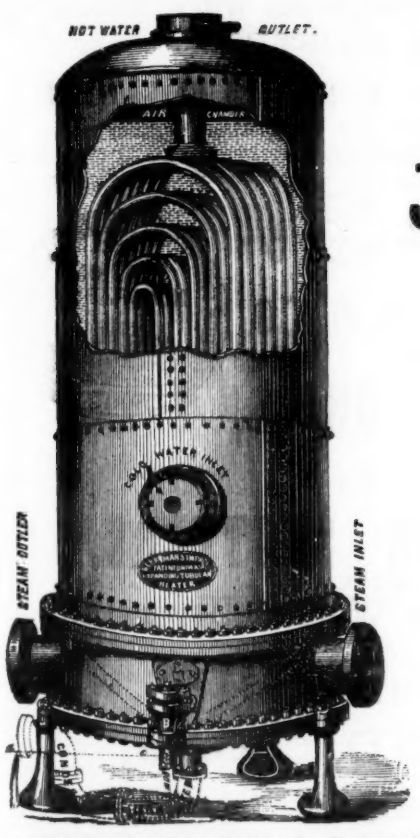
ENGINEERS, LEEDS.

CATALOGUES ON APPLICATION.



IMPORTANT.

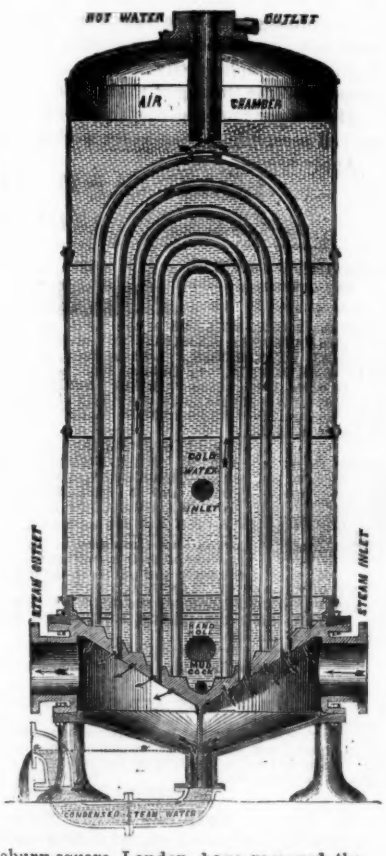
JOSEPH WRIGHT AND CO.

(LIMITED),

NEPTUNE FORGE ENGINE AND BOILER WORKS,

TIPTON, STAFFORDSHIRE,

AND AT 147, QUEEN VICTORIA STREET, LONDON, E.C.



Having purchased the Engineering Business lately carried on by R. BERRYMAN AND CO., at 23, Congreve-street, Birmingham, and 28, Wilson-street, Finsbury-square, London, have removed the whole to their Works at TIPTON, to which place ALL COMMUNICATIONS SHOULD IN FUTURE BE ADDRESSED, and where the BERRYMAN HEATER can be seen at work, and in every stage of manufacture.

Being the SOLE MAKERS and PATENTEES of these CELEBRATED COAL SAVERS and EXHAUST STEAM UTILISERS, and having remodelled and greatly improved them, adding largely to their HEATING SURFACE and WATER CAPACITY, J. W. and Co. have put down a special plant, which includes an entire new set of improved patterns, enabling them to offer these FEED WATER HEATERS to the public at

GREATLY REDUCED PRICES.

This arrangement of BRASS TUBES of a great length giving an enormous HEATING SURFACE makes this HEATER not only the MOST POWERFUL ever invented, but its FIRST COST PER FOOT OF HEATING SURFACE IS LESS THAN HALF THAT OF ANY OTHER. It will condense the whole of the Exhaust Steam from the Engine if required, and entirely does away with the NOISE and BACK PRESSURE from exhaust pipes.

ALL THE TUBES ARE OF SPECIALLY PREPARED SOLID DRAWN BRASS AND COPPER; both ends are expanded into the bored holes of the same Tube Plate, METAL to METAL, and every tube is free to expand and contract independent of each other. Leakage is impossible, as, when the tubes are once fixed, nothing short of cutting out will remove them. No scurf adheres to the tubes because of the difference of expansion between SCURF and BRASS. The inside of the Heater can be washed out by means of the mud cock and hand hole whilst at work.

Only one pump or injector is required, and as the Heater is placed between the pump and the boiler, the water is forced, COLD, into it, and passes out at the top HOT into the boiler direct. Where the WATER WORKS PRESSURE is sufficient no pump or injector is needed.

The water being heated to BOILING POINT UNDER PRESSURE in the Heater, a saving of from 20 per cent. to 25 per cent. in fuel is effected; the disastrous results of grease in boilers are also avoided, the sewage and other loose matter in the water being deposited in the Heater, the acids are liberated there instead of in the boiler.

Every part can be lined with BRASS, COPPER, or LEAD, as may be required in special cases for heating water or any kind of liquor in large quantities for CHEMICAL WORKS, BATHS, WASH-HOUSES, AQUARIA, GREENHOUSES, BREWERIES, WOOL WASHING, DYE WORKS, TANNERIES, &c., &c.; they will also HEAT AIR FOR CUPOLAS AND BLAST FURNACES, and are now at work as INTERHEATERS for compound engines with direct steam from the boiler with a further saving of 15 per cent.

The New Price List, with detail information is now ready, and will be sent on application, together with an Illustrated Catalogue, with references and testimonials from Firms using UP HUNDRED AND THIRTY-THREE of these Heaters.

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Stones broken equal, and Ores better, than by hand, at one-tenth the cost.

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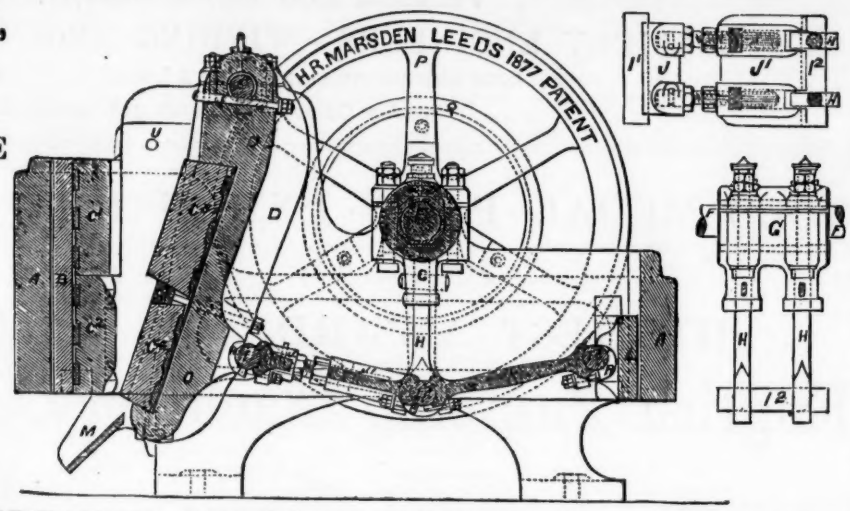

READ THIS—

Wharthole Lime Works, Maryport, Whitehaven, November 7, 1873.

H. R. MARSDEN, Esq., Soho Foundry, Meadow-lane, Leeds.

DEAR SIR,—The machine I have in use is one of the large size, 24 in. by 12 in. The quantity we are breaking daily with this one machine is 250 tons, the jaw being set to break to a size of 2½ in. We have, however, frequently broken over 300 tons per day of ten hours, and on several occasions over 360 tons during the same period. The stone we break is the blue mountain limestone, and is used as a flux in the various ironworks in this district. We have now had this machine in daily use for over two years without repairs of any kind, and have never had occasion to complain of any inconvenience in using the machine. I hope the one you are now making for me may do its work equally well. The cost—INCLUDING ENGINE-POWER, COALS, ENGINEMAN, FEEDING, and all EXPENSES OF EVERY KIND—is just 3d. per ton. Should any of your friends feel desirous of seeing one of your machines at work, I shall have much pleasure in showing the one alluded to.

I am, dear Sir, yours very truly,
WILLIAM MILLER.

AND THIS—

Wharthole Lime Works, Aspatria, Cumberland, July 11th, 1878.

H. R. MARSDEN, Esq., Soho Foundry, Leeds.

DEAR SIR,—We are in receipt of your letter of 4th inst. I may just state that the stone breaker above named has been under my personal superintendence since its erection, and I have no hesitation in saying that it is as good now as it was five years ago.

I am, dear Sir, yours faithfully,
FRANCIS GOULD.

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ALL BEARINGS are renewable, and made of H.R.M.'s Patent Compound ANTIFRICTION METAL.

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In ordinary ends two machines may be worked together, and at a proportionately increased speed. They are strong, light, and simple, easily worked, and adapted for ends and stopes, and the sinking of winzes and shafts.

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